Patent Claims

1.   A bed water sampling device for simultaneously collecting a plurality of water samples from the lowest water column at different levels above a water bed with a plurality of cylindrical sample containers provided at at least one end with a closure device actuated by a time-controlled release and arranged for vertical adjustment in a horizontal orientation on a center support rod terminating at one end in a ground element and connected at its opposite end to a steel cable for positioning on a water bed

characterized by the fact that

the center support rod (2) is connected at low friction and for free rotatability between a weighted base frame (7) as the ground element and the steel cable (9) at low friction and with a flow vane (6), that the time-controlled release (10) is mounted in the weighted base frame (7)in a compression proof manner and is activated automatically only by the placement continuing for a predetermined time on the water bed and that the sample containers (3) are provided at their other end (15) with a closure device (16) also actuated by the time-controlled release (10).

2.   The bed water sampling device of claim 1,

characterized by the fact that

the two closure devices (16) of each sampling container (3) are provided with closure valves (17) which in the open state are connected against the bias of a rubber tension device (18) by a release shaft (21) latched by a corrosion wire (22), the corrosion wire being charged with electrical voltage leading to its rupture by activating the time controlled release (10).

3.   The bed water sampling device of claim 1 or 2,

characterized by the fact that

each sampling container (3) is provided with a water discharge valve (23) and, positioned diametrically opposite, an air inlet valve (24).

4.   The bed water sampling device of one of claims 1 to 3,
characterized by the fact that
the sampling container (3) is transparent.

5   5.   The bed water sampling device of one of claims 1 to 3,
characterized by the fact that
the sampling containers (3) and both closure devices (16) are constructed to
be compression proof.

10   6.   The bed water sampling device of one of claims 1 to 5,
characterized by the fact that
a total of six sampling containers (3) are arranged at a height of 2 m and that
each sampling container (3) has a filling capacity of 5 to 6 l.

15   7.   The bed water sampling device of one of claims 1 to 6,
characterized by the fact that
above the sampling device (1) one or more buoyancy units are attached to a
steel cable (9).

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